

DEPARTMENT OF THE AIR FORCE

22D CIVIL ENGINEER SQUADRON (AMC) McConnell AIR FORCE BASE, KANSAS

MEMORANDUM FOR US ENVIRONMENTAL PROTECTION AGENCY (USEPA)

ATTN: Ruby Crysler – Resource Conservation and Recovery Act (RCRA) Corrective Actions and Permits

11201 Renner Blvd Lenexa, KS 66219

FROM: 22 CES/CD

57830 Pittsburg Street, Suite 120 McConnell AFB, KS 67221-3617

SUBJECT: First Quarter 2016 Progress Report for Hazardous and Solid Waste Amendment (HSWA) Part II Permit KS1571924140

- 1. McConnell Air Force Base (MAFB) is including in this report a summary of the actions performed during the 4th Quarter of 2015 to fulfill the requirements of the HSWA Part II Permit. Actions performed include document submittals, correspondence, fieldwork, conference calls and meetings, and Land Use Control (LUC) annual site inspection forms for selected Installation Restoration Program (IRP) sites.
- 2. Documents submitted to USEPA and Kansas Department of Health and Environment (KDHE) for review and comments during this reporting period include:
 - a. Draft OW632 RCRA Facility Assessment (RFA) Report
 - b. Final Revision 1, OW627 Interim Measures Work Plan (IMWP)
 - c. Final Revision 3, OW026, OW037, OW041, and TU601 RCRA Facility Investigation (RFI) WP
 - d. Final OW633, SS044, OT547, and ST017 IMWP
 - e. Draft SS544 RFI Report
 - f. Draft FT006, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report

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g. Draft TU036 Insitu Chemical Oxidation (ISCO) Injection Completion Report

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- h. Draft ID636 Corrective Measures Study (CMS)
- i. Draft OT547, 2015 ISCO Injection Completion Report
- j. Draft LF034, 2016 Mitigation Injection Round 2 Technical Memorandum (TM)
- k. Final Revision 1, 13 Inactive SWMU Sites RFA Report
- Draft FT007, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report
- m. Draft ST017, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report
- n. Draft LF035, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report
- Draft SS001, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report
- p. Final Revision 1, 13 Inactive Solid Waste Management Unit (SWMU) Sites RFA Report
- q. Final FT007, 2014 Quarter 4 Interim Measures Performance Monitoring (IMPM) Data Report
- r. Final FT006, 2015 Quarter 1 IMPM Data Report
- s. Final FT006, 2015 Quarter 2 IMPM Data Report
- t. Final FT007, 2015 Quarter 1 IMPM Data Report
- Final LF034, 2014 Long Term Groundwater and Treatment System Monitoring Annual Report.
- v. Final LF011, 2014 Long-Term Groundwater and Treatment System Monitoring Annual Report
- w. Final LF034, 2014 Quarter 4 IMPM Data Report
- x. Final SS001, 2014 Quarter 4 IMPM Data Report
- y. Final Revision 1, OW040, OW0625, OW634, OW970, and SS044 RFI and CMS Work Plan (WP)
- z. Final SWMU 201 RCRA Facility Assessment (RFA) Addendum WP
- aa. Final SS001, 2014 Long Term Groundwater and Treatment System Monitoring Annual Report

- bb. Final Revision 1, LF011, 2014 Long-Term Monitoring (LTM) Annual Report
- cc. Final Revision 1, SS001, 2014 ISCO Injection Completion Report
- dd. Final, SS012 Titan II Missile Site (MS) 12 Supplemental Investigation Report
- ee. Draft ID636, 2015 Quarter 3 IMPM Annual Report
- ff. Final FT006, 2015 Quarter 4 IMPM Data Report
- gg. Final FT007, 2015 Quarter 4 IMPM Data Report
- hh. Draft SS014, 2015 Quarter 3 IMPM Annual Report
- ii. Draft SS044 ISCO Injection Completion Report
- jj. Draft SS003, 2015 Long-Term Groundwater and Treatment System Monitoring Annual Report
- kk. Draft Revision 1, ST026 Titan II MS 17 Proposed Plan
- Final Revision 1, ID636 Insitu Chemical Reduction (ISCR) Injection Completion Report
 mm. Final ID636, 2015 Quarter 1 IMPM Data Report
- nn. Final SS044, 2015 Quarter 4 IMPM Data Report
- 3. Documents received from Architecture, Engineering, Consulting, Operations, and Maintenance (AECOM) and reviewed by MAFB, United States Army Corps of Engineers (USACE), Air Force Civil Engineer Center (AFCEC), and Air Force Legal Operations Agency (AFLOA) include:
 - a. Pre-Draft SS001, 2015 LTM Annual Report
 - b. Pre-Draft ST017, 2015 LTM Annual Report
 - c. Pre-Draft SS014, 2015 Quarter 3 IMPM Annual Report
 - d. Pre-Draft ID636, 2015 Quarter 3 IMPM Annual Report
 - e. Pre-Draft SS012, Remedial Action Work Plan (RAWP)
 - f. Pre-Draft FT007, 2015 Quarter 4 IMPM Data Report
 - g. Pre-Draft LF011, 2015 LTM Annual Report

- h. Pre-Draft FT006, 2015 Quarter 4 IMPM Data Report
- i. Pre-Draft SS003, 2015 LTM Annual Report
- j. Pre-Draft SS044, 2015 ISCO Injection Completion Report
- k. Pre-Draft SS014, 2015 IMPM Data Report
- 1. Pre-Draft ST005, Titan II MS 2 Supplemental Investigation Report
- m. Pre-Draft LF034, 2015 Quarter 4 IMPM Data Report
- n. Pre-Draft SS001, 2015 Quarter 4 IMPM Data Report
- o. Pre-Draft ID636, 2015 Quarter 4 IMPM Data Report
- p. Pre-Draft TU036, 2015 Quarter 4 IMPM Data Report
- q. Pre-Draft OT547, 2015 Quarter 4 IMPM Data Report
- r. Pre-Draft OW037, RFI Report
- 4. Correspondence between USEPA, KDHE, MAFB, USACE, AFLOA, and AECOM include the following:

Date	From	То	Subject
01/02/2016	AECOM	KDHE	URS responses to KDHE comments on the FT007 Draft
			Quarter 1 IMPM Data Report.
01/05/2016	AECOM	KDHE	Responses to comments for the DP009 WP.
01/06/2016	USEPA	MAFB	Document review comments for the Draft FT006, 2015
	V		Quarter 1 IMPM Data Report.
01/06/2016	USEPA	MAFB	Document approval notice for the Final ST017, 2014
		¥	LTM Annual Report.
01/06/2016	USEPA	MAFB	Document review comments for the Final OW040,
			OW625, OW634, OW970, and SS044 RFI and CMSWP.
01/06/2016	USEPA	MAFB	Document approval notice for the Final OW627 Interim
		-	Measures Work Plan (IMWP).
01/08/2016	KDHE	MAFB	Received the signed Right of Entry (ROE) document
			giving KDHE permission to collect soil and groundwater
			samples along the West Gate entry drive. MAFB
			informed KDHE that it may take 2 to 4 weeks to obtain
			the Wing Commander's signature on the ROE document.
01/11/2016	AECOM	MAFB	Notification that the public comment period for the MS03
			Proposed Plan (PP) will begin on 19 January 2016 and it
			will continue through 17 February 2016.
01/12/2016	USEPA	MAFB	Document review comments for the Draft FT007, 2014
~		and	Quarter 4 IMPM Data Report.
		AECOM	

Date	From	To	Subject
01/12/2016	KDHE	MAFB	Document review comments for the Draft Remedial Investigation Work Plan (RIWP) for the Smoky Hills Weapons Range Sites.
01-12-2016	KDHE	MAFB	Document review comments letter for the Draft RIWP for Smoky Hill Weapons Range Sites DP012, SS019, and SS020.
01/13/2016	USEPA	MAFB	Inquiry regarding missing 2015 Quarter 1 IMPM Reports for sites LF034, SS001 or SS014. MAFB contracted AECOM to verify that the reports were sent to the USEPA.
01/13/2016	AECOM	MAFB	Provided maps showing proposed locations for replacement groundwater monitoring wells within the KC46A construction area.
01/13/2016	MAFB	USEPA and KDHE	Forwarded maps showing proposed locations for groundwater monitoring wells closed as part of the KC46A construction activities. MAFB requested USEPA and KDHE review and approve the new locations.
01/13/2016	USEPA	MAFB	Approval notice for placement locations for new groundwater monitoring wells within the KC46A construction area.
01/13/2016	USEPA	MAFB	Document review comments letter for the Draft LF034, 2014 LTM Annual Report.
01/14/2016	KDHE	MAFB	Document approval letter for the Final OW040, OW625, OW634, OW970, and SS044 RFI and CMSWP.
01/16/2016	AECOM	USEPA	Response to inquiry regarding a missing report for SS014.
01/16/2016	AECOM	USEPA	Update regarding the OT547 RFI Data Gaps Study results.
01/19/2016	USEPA	MAFB	Update request for responses to 13 Inactive SWMU Sites Report.
01/19/2016	MAFB	KDHE	Request for approval for proposed locations for replacement groundwater monitoring wells in the KC46A construction area.
01/19/2016	USEPA	MAFB	Request for copies of the Smoky Hills Weapons Range WP documents. MAFB requested AECOM forward copies of the WP document to the USEPA.
01/19/2016	USEPA	MAFB	Update regarding pending USEPA Decision Documents (DDs) for selected MAFB Installation Restoration Program (IRP) sites.
01/19/2016	USEPA	MAFB	Clarification regarding sampling groundwater for 1, 4-dioxane.
01/19/2016	KDHE	MAFB and AECOM	Response to request for approval of annual meeting date and location.
01/19/2016	KDHE	AECOM	Approval notice for responses to comments on the FT007 Draft Quarter 1 IMPM Data Report.
01/19/2016	USEPA	MAFB	Comment response letter for the Draft SS004 RFAWP.

Date	From	To	Subject
01/19/2016	USEPA	MAFB	Document review comments letter for the Draft LF011,
01/17/2010	OBLIA	WIZUB	2014 LTM Annual Report.
01/19/2016	USEPA	MAFB	Document review comments letter for the Draft FT006,
01/19/2010	USEIA	WAID	2015 Quarter 2 IMPM Data Report.
01/20/2016	USEPA	MAFB	Document approval letter for the FL628 and ID638 RFI
01/20/2016	USEPA	MAFB	
01/20/2016	LICEDA	MAED	WP and Quality Assurance Prject Plan (QAPP).
01/20/2016	USEPA	MAFB	Document review comments letter for the Draft FT007,
01/21/2016	KDHE	MAED	2015 Quarter 1 IMPM Data Report.
01/21/2016	KDHE	MAFB	Notification of approval for the proposed replacement
01/01/0016	MAED	AECOM	well locations in the KC46A construction area.
01/21/2016	MAFB	AECOM	Notification of approval for the proposed replacement
		and	well locations within the KC46A construction area and
04/00/0046	TIGES !	USACE	request for a project kickoff meeting.
01/22/2016	USEPA	MAFB	Notification of approval to have the Performance Based
04/02/22			Contract (PBC) Annual Review Meeting at MAFB.
01/22/2016	AFLOA	MAFB	Document review comments for the MS12 Record of
	*		Decision (ROD).
01/22/2016	USEPA	MAFB	Notification regarding dates for the PBC Annual Review
	and		Meeting at MAFB.
	KDHE		
01/25/2016	USEPA	AECOM	Request for revised pages for the 13 SWMU Sites RFA
			report.
01/25/2016	KDHE	MAFB	Request for anticipated number of risk assessment work
		and	plans for calendar year 2016.
		AECOM	
01/26/2016	AECOM	USEPA	Response to inquiry regarding the KC46A replacement
			well locations.
01/26/2016	AECOM	USEPA	Update regarding the 13 SWMU Sites RFA report.
01/26/2016	USEPA	AECOM	Response to update regarding the 13 SWMU Sites RFA
5			report.
01/26/2016	KDHE	MAFB	KDHE concurrence with EPA responses to the 13 SWMU
		and	Sites RFA report.
		AECOM	
01/26/2016	USEPA	MAFB	Notice of Public Notice for MAFB SWMU and IRP sites.
01/27/2016	AECOM	USACE	Notice of updated 13 SWMU Sites RFA report.
		and	The state of the s
		KDHE	
01/28/2016	USEPA	MAFB	Notice of Public Comment Period for Proposed Final
			Remedies for Cleanup at MAFB for SWMU Sites 118,
			159, 194, 195, and IRP site OT015. MAFB forwarded the
			notice to AFLOA for legal review and comment.
01/28/2016	KDHE	MAFB	Document review comments letter for the SS012 Draft
			Supplemental Investigation Report.
02/01/2016	MAFB	USACE	Notice to AECOM and USACE that the USEPA has
2010		and	drafted No Further Action (NFA)-Unlimited
		AECOM	Use/Unlimited Exposure (UU/UE) DDs for ID635, ID637,
			SWMU 194, FR357, OT015, and ID626.
			5 11 110 177, 1 1057, 0 1015, and 1D020.

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Date	From	То	Subject
02/01/2016	MAFB	USEPA	Status updates request for the ID635 and FR357 TM
			documents and request for a copy of the public notice for SOB documents.
02/02/2016	USEPA	MAFB	Notifed of Public Notice for SOB documents.
02/02/2016	USEPA	MAFB	Notified of Public Notice for SOB documents.
02/02/2016	KDHE	AECOM	OT547 Data Gaps Study Report Recall Reminder to AECOM.
02/02/2016	KDHE	MAFB	Update notice regarding status of the Titan II MS PP and Fact Sheet documents.
02/02/2016	KDHE	MAFB	No additional comments notification letter for the Draft FT007, 2014 Quarter 4 IMPM Data Report.
02/03/2016	USEPA	MAFB	Document approval letter for the Draft SS014, 2015 Quarter 2 IMPM Data Report.
02/03/2016	USEPA	MAFB	Document review comments letter for the Risk Assessment TM document.
02/03/2016	USEPA	MAFB	Document approval letter for the Draft LF034, 2015 Quarter 2 IMPM Data Report.
02/03/2016	AECOM	KDHE	Notice to KDHE that the OT547 Data Gaps Study Report Recall Notice is in the works and will be issued shortly.
02/04/2016	AECOM	USEPA	Responses to comments regarding the 1-26-2016 conference call.
02/08/2016	AECOM	USEPA	Response to inquiry regarding SWMU sites located within IRP site OT547.
02/08/2016	AECOM	USEPA	Responses to comments for the Background Metals Study.
02/09/2016	AECOM	MAFB and USACE	Responses to USEPA comments for the SS004 Draft RFAWP, FT007 Draft 2015 Quarter 1 IM PM Data Report, FT006 Draft 2015 Quarter 2 IM PM Data Report, LF011 Draft 2014 TM Report, LF034 Draft 2014 LTM Report, and FT007 Draft 2014 Quarter 4 IMPM Data Report.
02/09/2016	USEPA	AECOM	Response to inquiry regarding the Background Metals Study.
02/10/2016	MAFB	KDHE	Inquiry requesting update status for approval of the SS029 PP.
02/09/2016	USEPA	AECOM	Notification of corrections that needed to be made in the Background Metals Study tables.
02/10/2016	KDHE	MAFB	Update on the status of the SS029 FS and PP documents.
02/10/2016	KDHE	MAFB	Notice of intent to approve the SS029 Fact Sheet and PP documents.
02/12/2016	AECOM	MAFB, USACE, KDHE, AFCEC	Request for meeting at MAFB to discuss the SS544 Draft RFI Report. MAFB was in agreement for the meeting day and time and reserved the CES conference room for the day of the meeting.

Date	From	То	Subject
02/12/2016	USEPA	AECOM	Document approval notice for the Draft LF034, 2014
			Quarter 4 IMPM Data Report, and SS001 Draft 2014,
			Quarter 3 IMPM Data Report.
02/17/2016	AECOM	KDHE	Response to inquiry regarding the expected number of risk
×			assessment reports for calendar year 2016. AECOM
			stated they expect to complete 55 risk assessments this
			year.
02/17/2016	MAFB	KDHE	Notified KDHE regarding response to inquiry regarding
00/45/0045	1.500.6	164.55	MS3 PP and Fact Sheet documents.
02/17/2017	AECOM	MAFB	Responses to comments for the Risk Assessment TM
		and	document.
02/17/2016	LICEDA	USACE	D
02/17/2016	USEPA	MAFB	Document approval notice for the Final FT006, 2015
02/17/2016	LICEDA	MAED	Quarter 1 IMPM Data Report.
02/17/2016	USEPA	MAFB	Document approval notice for the Final FT006, 2015
02/18/2016	KANG	MAFB	Quarter 2 IMPM Data Report.
- 12 - 12 - 13 - 13 - 13 - 13 - 13 - 13			Notice of possible damage to Building 44 from IM efforts.
02/18/2016	KDHE	MAFB	Document review comments for the Draft FT007 LTM
02/19/2016	AECOM	USEPA	report. Notification to the agencies that the extent of groundwater
02/19/2010	AECOM	and	contamination for the OT547 site has been determined.
		KDHE	containmation for the 01347 site has been determined.
02/22/2016	AECOM	USEPA	Response to inquiry regarding the Base-Wide Background
02/22/2010	ALCOM	OSLITI	Metals Study.
02/22/2016	USEPA	AECOM	Inquiry regarding the Base-Wide Background Metals
02/22/2010	002111	11200111	Study.
02/22/2016	AECOM	MAFB	Notification of additional IM injection points at the
A.			SS001, FT006, and OW041 sites.
02/22/2016	KDHE	MAFB	Notification of response to MS3 inquiry.
02/22/2016	KDHE	MAFB	Document approval letter for the Final FT007, 2014
			Quarter 4 IMPM Data Report.
02/22/2016	KDHE	MAFB	Document approval letter for the Final FT006, 2015
	8		Quarter 2 IMPM Data Report.
02/22/2016	KDHE	MAFB	Document approval letter for the Final FT007, 2015
			Quarter 1 IMPM Data Report.
02/22/2016	KDHE	MAFB	Document approval letter for the Final FT006, 2015
			Quarter 1 IMPM Data Report.
02/22/2016	KDHE	MAFB	Document approval letter for the Final SS001, 2014
			Quarter 4 IMPM Data Report.
02/22/2016	KDHE	MAFB	Document approval letter for the Final LF034, 2014
00/00/2015	LIGER :	A FIGURE	Quarter 4 IMPM Data Report.
02/23/2016	USEPA	AECOM	Document approval notice for the SS001 Final Rev. 2
00/02/0016	LIGERA	MAED	2014 ISCR Report.
02/23/2016	USEPA	MAFB	Document approval notice for the Final FT007, 2015
			Quarter 1 IMPM Data Report.

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Date	From	То	Subject
02/23/2016	KDHE	AECOM	Document comment notice for the LF011 2014 LTM Groundwater and Treatment System Monitoring Annual Report.
02/24/2016	KDHE	AECOM	Document approval notification for the Final Revision 2 SS001, 2014 ISCR Injection Completion Report.
02/24/2016	USEPA	AECOM	Document approval notification for the Final Revision 2 SS001, 2014 ISCR Injection Completion Report.
02/24/2016	KDHE	AECOM and USEPA	Inquiry regarding the Final Revision 2 SS001, 2014 ISCR Injection Completion Report.
02/24/2016	USEPA	AECOM and KDHE	Response to inquiry regarding the Final Revision 2 SS001, 2014 ISCR Injection Completion Report.
02/24/2016	KDHE	AECOM	Inquiry regarding PM scheduling.
02/24/2016	KDHE	MAFB	Notification letter that the Final LF011, 2014 Long-Term Groundwater and Treatment System Monitoring Report is not approved.
02/24/2016	KDHE	MAFB	Notification that the Final LF034, 2014 Long-Term Groundwater and Treatment System Monitoring Report is approved.
02/24/2016	KDHE	MAFB	Response to the Titan II MS Investigation Derived Waste (IDW) Discharge Memorandum.
02/24/2016	KDHE	MAFB	Clarification of the response to the Titan II MS IDW Discharge Memo.
02/24/2016	USEPA	AECOM and MAFB	Document approval notice for the Draft LF034, 2014 LTM Annual Report; Draft LF034, 2014 Quarter 4 IMPM Report; and Draft SS001, 2014 Quarter 4 IMPM Report.
02/24/2016	USEPA	KDHE	Document approval letter for the Final FT007, 2014 IMPM Data Report.
02/26/2016	USEPA	MAFB	Document review comments for the Draft ID636 IMPM WP and Final ID636 ISCR Injection Completion Report.
02/29/2016	USEPA	MAFB	Document approval notice for the Final LF034, 2014 Long-Term Groundwater and Treatment System Monitoring Annual Report.
03/01/2016	USEPA	MAFB	Document review comments for the Draft ID636, 2015 Quarter 1 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document approval notice for the Final LF034, 2014 Quarter 4 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document approval notice for the Final SS001, 2014 Quarter 4 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document review comments for the Draft FT004 Site Closure WP.
03/01/2016	USEPA	MAFB	Document approval notice for the Final LF034, 2014 Quarter 4 IMPM Data Report.

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Date	From	То	Subject
03/01/2016	USEPA	MAFB	Document approval notice for the Final FT007 Bioreactor Shutdown Request TM.
03/01/2016	USEPA	MAFB	Document review comments for the Draft ID636, 2015 Quarter 1 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document review comments for the Draft FT004 Site Closure WP.
03/01/2016	USEPA	MAFB	Document approval letter for the FT007 Final TM to shut down the bioreactor.
03/01/2016	USEPA	MAFB	Document review comments for the Draft ID636, 2015 Quarter 2 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document approval notice for the Final SS001, 2014 Quarter 4 IMPM Data Report.
03/01/2016	USEPA	MAFB	Document review comments for the Draft ID636, 2015 Quarter 2 IMPM Data Report.
03/02/2016	USEPA	MAFB	Document approval notice for the Final FT007, 2014 IMPM Data Report.
03/07/2016	USEPA	AECOM and MAFB	Request for a conference call to discuss all the recently concluded Oil Water Separator (OWS) studies.
03/08/2016	USEPA	MAFB	Document review comments for the Draft OW576 RFI WP.
03/09/2016	USEPA	AECOM and MAFB	Document review comments for the Base-Wide Background Metals Study.
03/09/2016	AECOM	MAFB	Received the MS 17 Revised Final PP for review and approval.
03/10/2016	KDHE	AECOM	Approval notice for responses to KDHE comments on the SS012 Draft SI Report.
03/20/2016	USEPA	MAFB	Document review comment letter for the Draft OW578 RFI Addendum.
03/11/2016	KDHE	MAFB	Approval notice for the Final FT007 Bioreactor Shutdown Request TM.
03/11/2016	KDHE	MAFB	Document approval notice for the Final SS029 PP.
03/11/2016	KDHE	MAFB	Document approval notice for the Final SS007 Bioreactor Shutdown Request TM.
03/15/2016	AECOM	MAFB	Responses to regulator comments for the Smoky Hills Weapons Range Sites and the FT004 site. MAFB reviewed the responses to comments and approved for release to the regulators.
03/16/2016	KDHE	MAFB	Document approval notice for the Final Supplemental Investigation Report for Titan II MS 12.
03/21/2016	MAFB	AECOM	Approved the MS 17 Revised Final PP for release to the KDHE and USEPA.
03/21/2016	KDHE	MAFB	Request for an update regarding on-going PBC activities.

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Date	From	То	Subject
03/24/2016	AECOM	KDHE	Responses to comments on the DP012, SS019, and SS020 Draft Remedial Investigation (RI) WP and the DP009 Draft RIWP.
03/24/2016	KDHE	AECOM	Document review comments for the Draft PP for Titan II Missile Site 15.
03/28/2016	KDHE	MAFB	Document approval notice for the LF011, 2014 LTM report.
03/28/2016	KDHE	MAFB	Document approval letter for the Final Revision 1 LF011, 2014 Long-Term Groundwater and Treatment System Monitoring Report.
03/28/2016	KDHE	MAFB	Document approval letter for the Final Revision 1 OW040, OW625, OW634, OW970, and SS044 RFI and CMSWP.
03/29/2016	AECOM	MAFB	Responses to USEPA's comments on the OW576 Draft RFIWP. MAFB reviewed the responses to comments and approved for release to the USEPA.
03/29/2016	AECOM	MAFB	Notification of additional step-out boring locations for the OW26 site.
03/29/2016	AECOM	MAFB	URS responses to USEPA comments on the Draft OW578 RFI Addendum. MAFB reviewed the responses and approved for release to the USEPA.
03/29/2016	AECOM	MAFB	URS responses to comments on the LF034 Pre-Draft 2015 Quarter 4 IMPM Data Report. MAFB reviewed the responses and approved for release to the USEPA.
03/29/2016	KDHE	MAFB	Document approval letter for the Final Revision 1 OW040, OW625, OW634, OW970, and SS044 RFI and CMSWP.
03/29/2016	KDHE	MAFB	Document review comments for the Draft ID636, 2015 Quarter 2 IMPM Data Report.
03/29/2016	KDHE	MAFB	Document approval notice for the Final Revision 2 SS001, 2014 ISCO Injection Completion Report.
03/29/2016	KDHE	MAFB	Document review comments letter for the Draft LF034 Mitigation Injection Round 2 TM.
03/29/2016	KDHE	MAFB	Document review comments letter for the Draft FT006, 2016 ISCR Mitigation Injection TM.
03/30/2016	KDHE	MAFB	Comments regarding the SS001 and FT006 Mitigation Injection TMs.
03/30/2016	KDHE	MAFB	Request to use the Use of Field Activities Notification Form for all future projects.
03/30/2016	KDHE	MAFB	Document review comments letter for the Draft SS001, 2016 ISCR Mitigation Injection TM.
03/31/2016	KDHE	MAFB	Document approval notice for the FT006, 2015 Quarter 4 IMPM Data Report.
03/31/2016	KDHE	MAFB	Document approval notice for the FT007, 2015 Quarter 4 IMPM Data Report.

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5. Field actions started and/or completed this quarter are summarized in the following table:

Site	Time Period	Action
FT006	02/15/2016	Installed culverts on property.
	02/29/2016	Accomplished additional ZVI mitigation injections.
	03/07/2016	Accomplished ISCR mitigation injections. Also, collected
		groundwater samples from selected monitoring wells.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
FT007	03/07/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
ID636	03/07/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
LF034	03/07/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/21/2016	Accomplished ISCO mitigation injections. Collected groundwater samples from selected monitoring wells as part of the IMPM process.
MS004	01/04/2016	Collected groundwater samples from selected monitoring wells.
MS013	01/04/2016	Collected groundwater samples from selected monitoring wells.
	01/11/2016	Collected groundwater samples from selected monitoring wells.
MS06	01/04/2016	Collected groundwater samples from selected monitoring wells.
MS007	01/04/2016	Collected groundwater samples from selected monitoring wells.
MS016	01/11/2016	Collected groundwater samples from selected monitoring wells.
OT547	01/04/2016	Collected groundwater samples from newly installed monitoring wells.
	01/11/2016	Collected groundwater samples from newly installed monitoring wells.
	01/18/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	02/15/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/14/2016	Resumed pneumatic fracturing and ISCR injections. Also, collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
OW026	01/18/2016	Accomplished direct push groundwater sampling to further define the extent of the plume.
OW041	01/18/2016	Accomplished direct push groundwater sampling to further define the extent of the plume.
OW627	01/18/2016	Accomplished direct push soil sampling to further define the extent of soil contamination.

Site	Time Period	Action
OW633	01/04/2016	Continued IM activities. IM consisted of two field crews accomplishing pneumatic fracturing and ZVI injections and one crew
5		accomplishing pneumatic fracturing and injections of sodium
	01/11/2016	persulfate mixed with sodium hydroxide inside KANG Building 41. Continued IM activities. IM consisted of two field crews
		accomplishing pneumatic fracturing and ZVI injections and one crew
		accomplishing pneumatic fracturing and injections of sodium persulfate mixed with sodium hydroxide inside KANG Building 41.
	01/18/2016	Continued IM activities. IM consisted of two field crews
		accomplishing pneumatic fracturing and ZVI injections and one crew accomplishing pneumatic fracturing and injections of sodium
		persulfate mixed with sodium hydroxide inside KANG Building 41.
	01/25/2016	Continued IM activities. IM consisted of two field crews
		accomplishing pneumatic fracturing and ZVI injections and one crew accomplishing pneumatic fracturing and injections of sodium
	00/01/0016	persulfate mixed with sodium hydroxide inside KANG Building 41.
9	02/01/2016	Continued IM activities. IM consisted of two field crews accomplishing pneumatic fracturing and ZVI injections and one crew
		accomplishing pneumatic fracturing and injections of sodium
	02/08/2016	persulfate mixed with sodium hydroxide inside KANG Building 41. Continued IM activities. IM consisted of two field crews
	02/00/2010	accomplishing pneumatic fracturing and ZVI injections and one crew
		accomplishing pneumatic fracturing and injections of sodium
_	02/15/2016	persulfate mixed with sodium hydroxide inside KANG Building 41. Continued IM activities. IM consisted of two field crews
		accomplishing pneumatic fracturing and ZVI injections and one crew
		accomplishing pneumatic fracturing and injections of sodium persulfate mixed with sodium hydroxide inside KANG Building 41.
	02/22/2016	Continued IM activities. IM consisted of two field crews
		accomplishing pneumatic fracturing and ZVI injections and one crew accomplishing pneumatic fracturing and injections of sodium
		persulfate mixed with sodium hydroxide inside KANG Building 41.
	02/22/2016	Continued IM activities. IM consisted of two field crews accomplishing pneumatic fracturing and ZVI injections and one crew
		accomplishing pneumatic fracturing and injections of sodium
-	02/29/2016	persulfate mixed with sodium hydroxide inside KANG Building 41. Continued IM activities. IM consisted of two field crews
	02/27/2010	accomplishing pneumatic fracturing and ZVI injections and one crew
	ш	accomplishing pneumatic fracturing and injections of sodium
		persulfate mixed with sodium hydroxide inside KANG Building 41. In addition, groundwater samples were collected from selected
-	02/07/2016	monitoring wells as part of the IMPM process.
	03/07/2016	Collected groundwater samples from selected monitoring wells as part of the IMPM process.
	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.

Site	Time Period	Action
	03/21/2016	Resumed pneumatic fracturing and ISCR injections and installed
		injection wells inside Building 41. Also, collected groundwater
		samples from selected monitoring wells as part of the IMPM process.
	03/28/2016	Continued pneumatic fracturing and ZVI injections inside Building 41.
OW634	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
77001	04/40/2046	of the IMPM process.
SS001	01/18/2016	Collected groundwater samples from selected monitoring wells as part
	02/15/2016	of the IMPM process.
	02/15/2016	Collected groundwater samples from selected monitoring wells as part
	02/20/2016	of the IMPM process.
	02/29/2016	Accomplished additional ZVI mitigation injections at selected locations at the site.
	03/07/2016	Accomplished ISCR mitigation injections. Also, collected
	03/07/2010	groundwater samples from selected monitoring wells as part of the
		IMPM process.
	03/14/2016	Collected groundwater samples from selected monitoring wells as part
	03/14/2010	of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
	00/21/2010	of the IMPM process.
SS014	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
SS044	01/18/2016	Accomplished ISCO injections and collected groundwater samples
		from selected monitoring wells as part of the IMPM process.
	02/15/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
22.10	00/01/001/	of the IMPM process.
SS548	03/21/2016	Collected groundwater samples from selected monitoring wells as part
GT017	01/05/0016	of the IMPM process.
ST017	01/25/2016	Initiated work to accomplish additional ISCO injections at the site.
	02/01/2016	Continuation of fieldwork to accomplish additional ISCO injections at
	02/08/2016	the site. Collected groundwater samples from selected monitoring wells as part
	02/08/2010	of the IMPM process.
	02/16/2016	Collected groundwater samples from selected monitoring wells as part
	02/10/2010	of the IMPM process.
	02/22/2016	Collected groundwater samples from selected monitoring wells as part
	02,22,2010	of the IMPM process.
	02/29/2016	Collected groundwater samples from selected monitoring wells as part
	32,23,2010	of the IMPM process.

Site	Time Period	Action
	03/07/2016	Continuation of ISCO injections and collection of groundwater
×	v *	samples from selected monitoring wells as part of the IMPM process.
	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/21/2016	Continuation of ISCO injections. Also, collected groundwater
		samples from selected monitoring wells as part of the IMPM process.
	03/28/2016	Continuation of ISCO injections.
TU036	01/04/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	01/18/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	02/15/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/14/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.
	03/21/2016	Collected groundwater samples from selected monitoring wells as part
		of the IMPM process.

6. Meetings and conference calls:

- a. On 14 January 2016, a meeting was held between AECOM, KANG, and MAFB to discuss recently developed cracks within Building 48. The meeting was held because the building cracks appeared to have coincided with recent pneumatic fracturing and injection activities near the building. The contractor indicated that the building cracks may have resulted from recent tremors originating in Oklahoma. Other alternative explanations were discussed, including the possibility that the building cracks were a result of on-going IM activities. The meeting went well and at this point in time KANG appears satisfied with the results. A follow-up meeting may occur after all parties have had the opportunity to fully examine drawings, photographs, and field data.
- b. On 15 January 2016, a monthly update conference call between AECOM, MAFB, and the USACE was held. Topics of discussion included the document priority list, EPA Risk Assessment Tech Memo conference call, annual meeting, KANG Building 48 meeting, replacement groundwater monitoring wells within the KC46A construction area, Institutional Control Implementation Plan (ICIP) inspections, SWMU 207 draft RFI report, Titan II MS IDW status, and annual updates for the base IRP maps and MW database.
- c. On 20-21 January 2016, a meeting at MAFB was held between MAFB, AECOM, AFCEC, and the USACE to discuss progress with the fence-to-fence PBC. Topics of discussion included communication, base-wide documents, KDHE TPH policy changes, document reviews and status, RCRA First, RCRA permit, injection sites, OWS sites, no additional investigation sites, additional investigation sites, additional investigation sites, and landfill sites.

- d. On 22 January 2016, a conference call was held between MAFB and AFCEC to discuss project planning and funding for the SS005 site, RCRA Part II Permit Renewal, and sampling selected groundwater monitoring wells for 1,4-dioxane.
- e. On 26 January 2016, a monthly update conference call was held between AECOM, MAFB, USACE, USEPA, and the KDHE. Topics of discussion included the document priority list, OT547 Building 692 Former Equipment Washout Pit and Draft Gaps Study Report, 13 SWMU RFA Replacement Pages, a proposed annual review meeting and agenda items, maps, and status of the KC46A construction area replacement monitoring wells.
- f. On 09 February 2016, a monthly conference call was held between AECOM, USEPA, KDHE, and MAFB to discuss the Titan II Missile Sites and the Smoky Hills Weapons Range Sites. Topics of discussion included decision documents, field schedules, and the document review priority lists.
- g. On 18 February 2016, a conference call was held between MAFB, AECOM, AFCEC, and the USACE. Topics of discussion included the SS012 Right of Entry (ROE) for installation of groundwater monitoring wells, path forward for the OW545 site, the ID638 OWS investigation, path forward for the SS039 and OW633 sites, installation of a new drainage culvert on Mr. Charlie Byrd's property adjacent to the FT006 site, groundwater cleanup criteria, DD documents, ICIP native files, SWMU 207 draft report, status of the background metals study, and the annual review meeting.
- h. On 25 February 2016, a meeting was held between MAFB, USACE, and AECOM to discuss the replacement monitoring wells in the KC46A construction area. Topics of discussion included fieldwork schedule, logistics, communication and documentation requirements, well locations, well construction specifications, and IDW.
- i. On 01 March 2016, a meeting was held between MAFB, USACE, and AECOM to discuss final preparations for the annual review meeting with the USEPA and KDHE. Topics of discussion included schedule and last minute topics to include on the meeting agenda.
- j. On 02 March 2016, a meeting was held between MAFB, USACE, AECOM, AFCEC, KDHE and the USEPA to accomplish an annual review of on-going and planned environmental site characterization and remediation efforts. Topics of discussion included the SWMU 207 (a.k.a. SS544) Draft RFI Report, new TPH Policy Implementation, Vapor Intrusion Path Forward, 2014-2015 Injection Sites, annual LTM requirements, KC46A construction area replacement wells, anticipated 2016 injection sites and field schedule, Part II RCRA Permit, and the base ICIP. Due to time constraints, it was agreed to discuss the Responses to Comments Process at a later date via conference call.
- k. On 03 March 2016, a meeting was held between MAFB and AFCEC to discuss outcomes of the annual review meeting, action items, and schedule and funding for the RCRA Part II Permit Renewal, SS005 RFI Study, and the 1, 4-dioxane Projects.
- 1. On 03 March 2016, a meeting was held between MAFB, AFCEC, KANG, and AECOM to tour suspect damages to Buildings 48, 44, and 41.

- m. On 10 March 2016, a meeting was held at MAFB between AECOM, AFCEC/CZOM, and Wing Safety to discuss the Airfield Construction Waiver for selected IRP sites. After the meeting, Wing Safety agreed to initial off on the package and forward up the chain-of-command for signature by the Wing Commander.
- n. On 10 March 2016, a conference call between MAFB, AECOM, AFCEC, and the USACE was held to discuss PBC progress. MAFB did not attend the conference call as we were attending the Airfield Construction Waiver meeting. Topics of discussion included the document priority list, injection sites site restoration status, injection site building issues structural review status, ICIP native file version, and GIS native files.
- o. On 17 March 2016, a conference call was held between MAFB, AECOM, AFCEC, USACE, and KDHE to discuss the Titan II sites and the Smoky Hills Weapons Range sites. Topics of discussion included the documents priority list review and the April fieldwork schedule. Mr. Sheldon Blair attended the meeting for MAFB.
- p. On 24 March 2016, a conference call was held between MAFB, AECOM, AFCEC, and the USACE to discuss on-going projects. Issues discussed included the document review list, fieldwork at the OW633 and ST017 sites, ICIP documents, and the SS012 easement.
- q. On 31 March 2016, a meeting was held between AECOM, AFCEC, USACE, and MAFB to discuss changes in site conditions at the SS039 and OW633 sites. MAFB attended the call via conference call.
- 9. If you have any questions regarding this memorandum, Mr. Cole Knight is the McConnell AFB Environmental Restoration Program Manager and can be contacted at (316) 759-3887.

STEPHEN C. MAŤTHEWS Deputy Base Civil Engineer

Attachment Quarterly Landfill Inspection Form

cc:

Ms. Jacqueline Grunau, KDHE (w/attachments)

Ms. Mandi Chase, KDHE (w/attachments)

Mr. Paul Roemerman, USEPA Region 7 (email only)

Mr. Chung Yen, AFCEE (email only)

INSPECTION/MONITORING FORM FOR CONTAMINATED MAFB SITES

Waste Site: LF34		。
A = Satisfactory X = Unsatisfactory (Comments Required) NA = Not Applicable		Comments or Corrective Action Taken (See Maintenance Register for Corrected Items)
Check for potential encroachments (Ensure that there is no active construction on the site.)	А	
Does the site have brush or woody vegetation that needs cutting and disposal?	N/A	
Does the site need grass cut?	А	Artificial turf installed on the soccer playing field other areas not yet growing season.
Verify that the groundwater wells and roads are accessible.	А	
Are the groundwater wells properly locked?	Α	
Is the concrete pad cracked or broken? Is the pad undercut or silted over (if applicable)?	А	
Are the groundwater wells properly identified?	А	8
Verify that the groundwater well posts and protective covers are in place.	А	
Verify that signs have the correct and legible nformation.	А	
Does the site show signs of erosion or subsidence? Are there any signs of burrowing animals (holes)?	A	
Are there any odors in the vicinity of the site that may be indicative of site contaminants?	А	
Verify that the fence is locked and in good condition (if applicable).	N/A	
Check the integrity of drainage ditches (if any) for presence of excessive erosion, sediment buildup, and any debris restricting water flow	N/A	
Does the site need general cleanup (housekeeping)?	А	
Inspect the results of interim measures or remedial section.	X	iSOC systems temporally removed per USEPA to explore rebound potential

Inspected By:	Dennis Heyer (Print Name)	 (Signature)	Date/Time: 03/21/14 0800
Reviewed By: PM or Designe	Cole Knight e (Print Name)		Date/Time: 6-10-2016

Note: USEPA Region VII and KDHE must be notified within 30 days of identification of any area where any breach or compromise of restrictions placed on this institutional control operable unit has occurred.